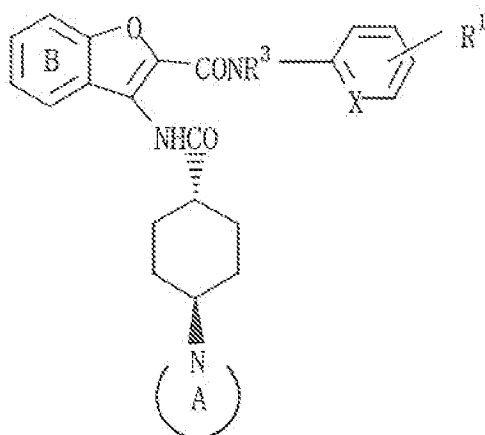


AMENDMENTS TO THE CLAIMS

Claim 1-10 (Canceled).

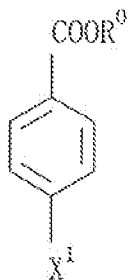
11. (Currently Amended) A process for preparing a compound of the formula [I]:



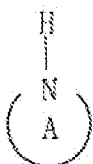
wherein X is a group of the formula: $-N\equiv$ or $-CH\equiv$; R^1 is a hydrogen atom, a halogen atom, a lower alkyl group, a lower alkoxy group, a cyano group or an amino group optionally substituted by a lower alkyl group; Ring A is a nitrogen-containing heterocyclic group; Ring B is an optionally substituted benzene ring or an optionally substituted pyridine ring; and R^3 is a hydrogen atom or a lower alkyl group, or a pharmaceutically acceptable salt thereof, which comprises:

(A)

1)-a) reacting a compound of the formula [II]:



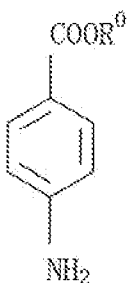
wherein R^0 is a hydrogen atom or a lower alkyl group and X^1 is a leaving group with a compound of the formula [III]:



wherein Ring A is a nitrogen-containing heterocyclic group, or

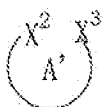
1)-b) reacting a compound of the formula [IV]:

~~wherein the symbol is the same as defined above with a compound of the formula [V]:~~



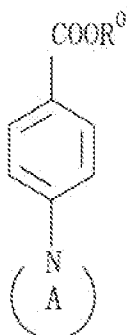
~~wherein the symbol is the same as defined above with a compound of the formula [V]:~~

~~wherein A' is a group derived from a nitrogen-containing heterocyclic group by removing a nitrogen atom, and X^2 and X^3 are leaving groups;~~



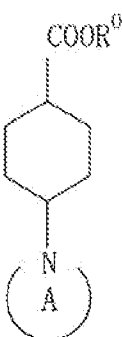
~~wherein A' is a group derived from a nitrogen-containing heterocyclic group by removing a nitrogen atom, and X^2 and X^3 are leaving groups;~~

2) subjecting the resulting compound of the formula [VI]:

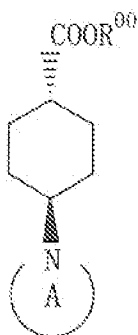


wherein the symbols are the same as defined above to catalytic reduction;

- 3) subjecting the resulting compound of the formula [VII]:



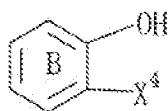
wherein the symbols are the same as defined above to lower-alkyl esterification when COOR^0 is a carboxyl group, followed by isomerization to give a trans-form compound of the formula [VIII]:



wherein R^{00} is a hydrogen atom or a lower alkyl group and the other symbol is the same as defined above; and separately,

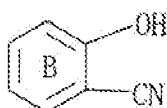
(B)

- 1) cyanation of a compound of the formula [IX]:

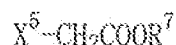


wherein Ring B is an optionally substituted benzene ring or an optionally substituted pyridine ring and X^4 is a leaving group,

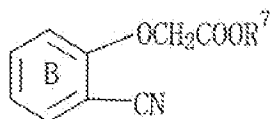
- 2) reacting the resulting compound of the formula [X]:



wherein the symbol is the same as defined above with a compound of the formula [XI]:



wherein R^7 is a hydrogen atom or an ester residue and X^5 is a leaving group, and reacting the resulting compound of the formula [XII]:

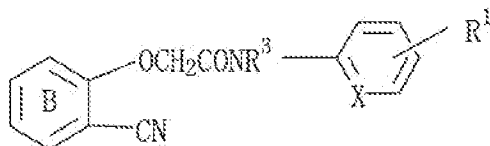


wherein the symbols are the same as defined above with a compound of the formula [XIII]:

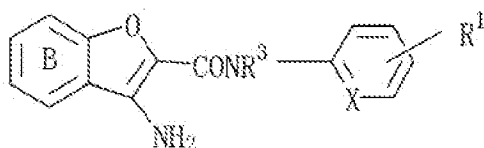


wherein R^3 is a hydrogen atom or a lower alkyl group, R^1 is a hydrogen atom, a halogen atom, a lower alkyl group, a lower alkoxy group, a cyano group or an amino group optionally substituted by a lower alkyl group and X is a formula: $-N=$ or $-CH=$, after converting the group R^7 of the compound [XII] to a hydrogen atom, when R^7 is an ester residue,

3) cyclizing the resulting compound of the formula [XIV]:



wherein the symbols are the same as defined above to give a compound of the formula [XV]:



wherein the symbols are the same as defined above; and

(C)

reacting a compound of the formula [XV] with a compound of the formula [VIII] or a reactive derivative thereof.

Claims 12-26 (Cancelled)

27. (New) The process according to claim 11, wherein the ester residue of R^7 in process (B) 2) is a lower alkyl residue selected from a group of consisting of methyl residue and ethyl residue.

28. (New) The process according to claim 11, wherein the reactive derivative thereof in process (C) includes acid halides.

29. (New) The process according to claim 11, wherein each of the leaving group of X^1-X^5 includes a halogen atom and sulfonic acid ester residues selected from the group of consisting of an arylsulfonyloxy group, a lower-alkylsulfonyloxy group and a perhalogenolower-alkylsulfonyloxy group.

30. (New) The process according to claim 11, wherein the reaction between the compound of the formula [II] and the compound of the formula [III] is carried out under nitrogen in the presence of a catalyst, a ligand and a base in an inert solvent.

31. (New) The process according to claim 30, wherein the catalyst includes homogeneous and heterogeneous catalysts.

32. (New) The process according to claim 32, wherein the homogenous catalyst includes palladium acetate and the heterogeneous catalyst includes a group VIII metal compound supported by a solid phase.

33. (New) The process according to claim 30, wherein the ligand includes diphenylphosphino compounds selected from the group of consisting of 2,2'-bis(diphenylphosphino)-1,1'-binaphthyl and 1,1'-bis(diphenylphosphino)ferrocene, triphenylphosphines.

34. (New) The process according to claim 30, wherein the base includes an inorganic base and an organic base.

35. (New) The process according to claim 30, wherein the palladium catalyst is used in an amount of approximately 0.001 - 0.1 equivalent, the ligand is used in an amount of approximately 0.002 - 0.2 equivalent, and the base is used in an amount of approximately 1 - 2 equivalent in relation to the compound of the formula [II].

36. (New) The process according to claim 30, wherein the reaction is carried out at 0 °C - 200 °C.

37. (New) The process according to claim 11, wherein the reaction between the compound of the formula [IV] and the compound of the formula [V] is carried out in the presence of a base in an inert solvent.

38. (New) The process according to claim 37, wherein the base is used in an amount of approximately 2 - 10 equivalent in relation to the compound of the formula [IV].

39. (New) The process according to claim 37, wherein the reaction is carried out at 0 °C - 30 °C.

40. (New) The process according to claim 11, wherein the catalytic reduction of the compound of the formula [VI] is carried out in the presence of a catalyst under hydrogen pressure in an inert solvent.

41. (New) The process according to claim 40, wherein the hydrogen pressure ranges from 7 to 30 atm.

42. (New) The process according to claim 40, wherein the catalyst includes a rhodium-carbon, and is used in an amount of approximately 0.01 - 0.1 equivalent in relation to the compound of the formula [VI].

43. (New) The process according to claim 40, wherein the reaction is carried out at -20°C - 120°C.

44. (New) The process according to claim 11, wherein the catalytic is carried out under a condition of pH 7 - 8.

45. (New) The process according to claim 11, wherein the lower-alkyl esterification of the compound of the formula [VII] is carried out by treating the compound with a lower alkanol in an acid condition in an inert solvent.

46. (New) The process according to claim 11, wherein the isomerization of the compound [VII] is carried out in the presence of a base in an appropriate solvent.

47. (New) The process according to claim 46, wherein the base includes alkali metal alkoxides and alkali metal amides, and the solvent includes an inert solvent.

48. (New) The process according to claim 47, wherein the base is used in an amount of approximately 1 - 2 equivalent in relation to the compound of the formula [VII].

49. (New) The process according to claim 46, wherein the isomerization reaction is carried out at -20°C - 150°C .

50. (New) The process according to claim 11, wherein the cyanation of the compound of the formula [IX] is carried out by treating the compound with a cyanizing agent in the presence of a catalyst, zinc and a ligand.

51. (New) The process according to claim 50, wherein the cyanizing agent includes zinc cyanide, copper cyanide, potassium cyanide, sodium cyanide, and acetone cyanohydrin.

52. (New) The process according to claim 11, wherein the reaction between the compound of the formula [X] and the compound of the formula [XI] is carried out in the presence of a halogenating agent and a base in an inert solvent.

53. (New) The process according to claim 52, wherein the reaction is carried out at 0°C - 60°C .

54. (New) The process according to claim 11, wherein the reaction between the compound of the formula [XII] and the compound of the formula [XIII] is carried out in the presence of a halogenating agent and a base in an inert solvent.

55. (New) The process according to claim 11, wherein the cyclization of the compound of the formula [XIV] is carried out in the presence of a base in an inert solvent.

56. (New) The process according to claim 55, wherein the base is used in an amount of approximately 0.05 - 2.2 equivalent in relation to the compound of the formula [XIV].

57. (New) The process according to claim 55, wherein the reaction is carried out at 0 °C - 100 °C.

58. (New) The process according to claim 11, wherein the reaction between the compound of the formula [XV] and the compound of the formula [VIII] or a reactive derivative thereof is carried out in the presence of a base in an inert solvent.

59. (New) The process according to claim 58, wherein the reaction is carried out at 15 °C - 25 °C.